

ABSTRACT**COMPARISON OF PREVALENCE OF ESBL-PRODUCING BACTERIA AMONG PERIPARTUM WOMEN IN PRIMARY HEALTH CENTER AND HOSPITAL**

ESBL-producing bacteria colonization among women during pregnancy or during labor is the risks for spreading and infection to the neonate. Prevalence of ESBL producing bacteria among peripartum period women in Indonesia has not yet fully studied. This study aimed to analyze the comparison of carrier prevalence of ESBL-producing normal gut flora among peripartum women in the community and hospitals. This study was an observational analytic study with cross-sectional approach. Samples was peripartum women who visited for examination at the Jagir Primary Health Care (PHC), and inpatient peripartum women who had been treated for more than 2 days in the room of Obstetry Gynecology department of Dr. Soetomo hospital and Airlangga University hospital. The specimens that taken from rectal swab of the research subjects were cultured on MacConkey Agar media supplemented with cefotaxime 1 mg/L, incubation 37°C overnight. The growth colonies were further identified biochemically and confirmed the ESBL using the DDST (Double Disk Synergy Test) method, then positive DDST results were identified for ESBL gene by PCR. The collection data was statistically analyzed with *chi-square*. Among 200 samples, 79 ESBL producers were identified, 28 (27.7%) from PHC and 51 (51.5%) from hospital. Prevalence of ESBL producing bacteria was significantly different between PHC and hospital ($p=0.001$). The biochemical identification found that the most detected bacteria positive for ESBL was *E. coli* (53.2%), and the most identified genes by PCR was CTX-M. Conclusion: The carrier rate of ESBL producing bacteria among pregnant women in hospital was higher than PHC.

Keywords: ESBL, Enterobacteriaceae, pregnant woman, Indonesia